

**REMARKS**

Claims 1-12 were examined in this application. Claims 1-12 were rejected under 35 U.S.C. § 103 over Nozaki (EPO 899,559). By this Amendment, claims 2-4, 6-8, and 10-12 have been amended and claims 1, 5, and 9 have been canceled without prejudice. In light of the amendments and remarks set forth below, Applicant respectfully submits that each of the pending claims is in immediate condition for allowance. Reconsideration is respectfully requested.

In paragraph 7 of the Office Action, claims 1-12 have been rejected under Section 103 over Nozaki. Applicant respectfully traverses this rejection.

Each of the independent claims of the present application, namely claims 2, 6, and 10 require:

a) determining the edge boundary condition showing the gray level corresponding to the pattern edge position through convolution operation of the optical point spread function corresponding to the laser beam strength and the inspected pattern image.

b) detecting the edge position in the pattern by the unit of sub-pixels according boundary condition.

c) calculating the pattern width of the inspected pattern according to the detected edge position.

Nozaki does not teach or suggest determining an edge boundary condition, the use of the laser beam strength in the determination of the edge boundary condition or the detection of an edge position using the edge boundary condition.

In rejecting the edge boundary condition determination limitation of the present application, the Office Action points to paragraph 61 of Nozaki. At this paragraph, Nozaki merely teaches that the reference image is generated in accordance with the value of an edge position. The Office Action erroneously extrapolates this teaching to read on the present limitation that requires the determination of an edge boundary condition which in turn is used to detect an edge position. Applicant respectfully submits that the determination of an edge boundary condition for use in detecting edges is neither taught nor suggested by Nozaki.

In Applicant's process of determining the edge boundary condition, references made to the "laser beam strength" in this determination. Applicant respectfully submits that Nozaki does not take into account the laser beam strength in its edge detection processing. The Office Action erroneously assumes that the strength of the laser beam "is defined by the shape of the pattern scanned by the laser beam". Applicant respectfully disagrees. The strength of the laser beam used to scan the inspected pattern is independent of the pattern itself. Applicant therefore respectfully submits that this limitation of all of the independent claims is neither taught nor suggested by Nozaki.

Withdrawal of the rejection of each of independent claims 2, 6, and 10 is therefore respectfully requested. Each of claims 3, 4, 7, 8, 11, and 12 depend from allowable independent claims 2, 6 or 8 and withdrawal of the rejection of these claims for the reasons stated above with respect to the independent claims is therefore respectfully requested.

Applicant has responded to all of the rejections and objections recited in the Office Action. Reconsideration and a Notice of Allowance for all of the pending claims are therefore respectfully requested.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If the Examiner believes an interview would be of assistance, the Examiner is welcome to contact the undersigned at the number listed below.

Dated: January 31, 2007

Respectfully submitted,

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